

**IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF MISSISSIPPI
EASTERN DIVISION**

BURROUGHS DIESEL, INC.

PLAINTIFF

v.

CIVIL ACTION NO. 2:18-CV-26-KS-MTP

BAKER PETROLITE, LLC, *et al.*

DEFENDANTS

MEMORANDUM OPINION AND ORDER

For the reasons provided below, the Court rules as follows:

1. The Court **grants** the Baker Defendants' Motion to Strike [174] portions of the affidavit of Plaintiff's expert, Fernando Lorenzo.
2. The Court **grants in part and denies in part** the Baker Defendants' Motion to Exclude [145] the testimony of Plaintiff's expert, Fernando Lorenzo. Specifically, the Court grants the motion with respect to Lorenzo's opinions regarding the remaining useful life of the metal buildings' roofing panels and side panels, and with respect to Lorenzo's opinions regarding several miscellaneous repair invoices. The Court denies the motion in all other respects.
3. The Court **denies** Defendant Poly Processing Company, LLC's ("Poly") Motion to Exclude [137] certain testimony by Plaintiff's experts, Fernando Lorenzo and Roger Craddock.
4. The Court **denies** Plaintiff's Motion to Exclude [140] certain testimony by Baker's expert, Gale Hoffnagle.
5. The Court **denies as moot** Plaintiff's Motion to Exclude [142] certain testimony by Baker's expert, James Koerber.
6. The Court **grants in part and denies in part** Poly's Motion for Summary Judgment [135]. The Court grants the motion with respect to Plaintiff's design defect claim, but the Court denies it in all other respects.

7. The Court **grants in part and denies in part** Baker's Motion for Summary Judgment [147]. The Court denies the motion with respect to Plaintiff's claimed cleanup costs, tire inventory, tools and equipment, and halogen lights, but the Court grants the motion in all other respects.

I. BACKGROUND

This case arises from a hydrochloric acid ("HCl") spill. Defendants Baker Petrolite, LLC and Baker Hughes Oilfield Operations, Inc. (collectively, "Baker") owned a 6,100 gallon polyethylene storage tank which was designed and manufactured by Defendant Poly Processing Company, LLC ("Poly"). Baker used the tank to store HCl. Plaintiff, Burroughs Diesel, Inc., owned property adjacent to Baker's property. In October 2016, approximately 5,300 gallons of HCl leaked from a crack in the bottom of the tank.

Plaintiff alleges that the spill created a cloud of HCl vapor that traveled to and engulfed its property for hours, causing extensive damage to buildings, vehicles, inventory, tools, machines, and equipment. Plaintiff contends that the spill had two causes. First, Plaintiff alleges that the storage tank had a manufacturing defect – a void, or air bubble, in the polyethylene that created a weak spot at the bottom of the tank. Second, Plaintiff alleges that Baker was negligent in its maintenance/use of the tank. Plaintiff claims that Baker failed to inspect the tank as recommended by the manufacturer, and that Baker routinely over-filled the tank, creating excess pressure which caused a crack to develop at the spot weakened by the manufacturing defect, which grew over time and eventually ruptured.

Plaintiff asserted state-law claims of negligence, gross negligence, trespass, and nuisance against Baker, as well as a claim under CERCLA, 42 U.S.C. § 9607, for recovery of its response costs. Plaintiff also asserted a product liability claim against Poly. The parties filed numerous dispositive motions, all of which are ripe for the Court's review.

II. MOTION TO STRIKE [174]

Baker argues that the Court should strike portions of Dr. Fernando Lorenzo's affidavit [162-2], presented in support of Plaintiff's responses to Baker's Motion for Summary Judgment [147] and Motion to Exclude [145] his testimony. Baker contends that the affidavit contains new, previously undisclosed expert opinions. Plaintiff claims that the opinions were timely disclosed.

A. Fair Market Value of the Burroughs Buildings

First, Baker argues that the Court should strike Lorenzo's opinion that the reduction in useful life of the metal buildings' roofs and side panels "is proportionate to the reduction in the fair market value of the buildings after the spill." Exhibit 2 to Response at 6, *Burroughs Diesel, Inc. v. Baker Petrolite, LLC*, No. 2:18-CV-26-KS-MTP (S.D. Miss. July 19, 2019), ECF No. 166-2. Lorenzo provided specific numbers: "[T]he diminution in value of the buildings after the spill is 65% of the pre-spill fair market value (\$4,427,770), which is \$2,878,050.50, leaving a post-spill fair market value of 35% or \$1,549,719.50." *Id.*

Plaintiff argues that another expert provided an appraisal of the buildings'

value before the spill, which was disclosed to Baker along with Lorenzo's opinions regarding the useful life of the buildings. Therefore, Plaintiff contends that Lorenzo's simple application of his own estimate of the buildings' remaining useful life to another expert's appraisal of the buildings' pre-spill value is not, in fact, a new opinion. The Court disagrees.

The Court closely examined Lorenzo's report [145-2], the transcript of his deposition [145-3], and the exhibits referred to in each. Although he provided estimates regarding the useful life of the buildings' roofs and side panels, he never expressed any opinion regarding the fair market value of the buildings. In fact, based on his report and deposition, one would not anticipate the possibility of Lorenzo expressing an opinion regarding the buildings' market value because such opinions are wholly dissimilar from his proposed area of expertise. Therefore, the opinions regarding the fair market value of the buildings in section 4, sub-paragraph (D) of his affidavit are new opinions, first disclosed in response to Baker's motion for summary judgment.

Rule 26 provides that "a party must disclose to the other parties the identity of any witness it may use at trial to present" expert testimony. FED. R. CIV. P. 26(a)(2)(A). "Unless otherwise stipulated or ordered by the court, this disclosure must be accompanied by a written report – prepared and signed by the witness – if the witness is one retained or specially employed to provide expert testimony in the case" FED. R. CIV. P. 26(a)(2)(B). "A party must make these disclosures at the times

and in the sequence that the court orders.” FED. R. CIV. P. 26(a)(2)(D). Local Rule 26 provides that a “party must make full and complete disclosure as required by Fed. R. Civ. P. 26(a) and L.U.Civ.R. 26(a)(2)(D) no later than the time specified in the case management order.” L.U.Civ.R. 26(a)(2).

Additionally, “[t]he parties must supplement these disclosures when required under Rule 26(e).” FED. R. CIV. P. 26(a)(2)(E). “[A] party is required to supplement its expert disclosures if the court so orders or if the party learns that in some material respect the information disclosed is incomplete or incorrect and if the additional or corrective information has not otherwise been made known to the other parties during the discovery process or in writing.” *Sierra Club, Lone Star Chapter v. Cedar Point Oil Co., Inc.*, 73 F.3d 546, 570 n. 42 (5th Cir. 1996) (quoting FED. R. CIV. P. 26(e)(1)). “[T]he party’s duty to supplement extends both to information included in the report and to information given during the expert’s deposition. Any additions or changes to this information must be disclosed by the time the party’s pretrial disclosures under Rule 26(a)(3) are due.” FED. R. CIV. P. 26(e)(2). “Unless the court orders otherwise,” pretrial disclosures must be made at least thirty days before trial.” FED. R. CIV. P. 26(a)(3). Local Rule 26 provides that a “party is under a duty to supplement disclosures at appropriate intervals under Fed. R. Civ. P. 26(e) and *in no event later than the discovery deadline* established by the case management order.” L.U.Civ.R. 26(a)(5) (emphasis added).

Therefore, if Plaintiff wanted to supplement the information provided in

Lorenzo's expert report and deposition, it was required to do so by the discovery deadline. Here, Plaintiff first disclosed Lorenzo's opinions regarding the fair market value of the buildings in response to Baker's motion for summary judgment. Therefore, the new opinions were not timely disclosed.

Rule 37 provides: "If a party fails to provide information or identify a witness as required by Rule 26(a) or (e), the party is not allowed to use that information or witness to supply evidence on a motion, at a hearing, or at trial, unless the failure was substantially justified or is harmless." FED. R. CIV. P. 37(c)(1). When determining whether to strike an expert's testimony for a party's failure to timely disclose it, the Court considers the following factors:

- (1) the importance of the witnesses' testimony;
- (2) the prejudice to the opposing party of allowing the witnesses to testify;
- (3) the possibility of curing such prejudice by a continuance; and
- (4) the explanation, if any, for the party's failure to comply with the discovery order.

Sierra Club, 73 F.3d at 572; *see also Reliance Ins. Co. v. La. Land & Exploration Co.*, 110 F.3d 253, 257 (5th Cir. 1997).

First, the testimony is important. Plaintiff has another expert, John Adamson, who provided an appraisal of the property's value before the spill. *See* Exhibit D to Motion for Summary Judgment, *Burroughs Diesel, Inc. v. Baker Petrolite, LLC*, No. 2:18-CV-26-KS-MTP (S.D. Miss. June 20, 2019), ECF No. 147-4. But Plaintiff apparently has no appraisal of the property's post-spill value.

However, allowing Lorenzo to provide expert testimony regarding the fair market value of the properties would be prejudicial to Baker. Baker was unable to question Lorenzo regarding any such opinions during his deposition, and it had no opportunity to obtain rebuttal opinions from its own experts. Moreover, there is no time to cure the prejudice because the pretrial conference is imminent. The Court will not reopen discovery at this late stage of the proceedings. At this point, the parties should be focused on preparation of a pretrial order and for trial.

Finally, Plaintiff has not provided any satisfactory explanation for its failure to timely disclose Lorenzo's opinions regarding the market value of the buildings. Therefore, the Court concludes that they should be excluded. Plaintiff is not allowed to rely on them in support of or response to a motion, at a hearing, or at trial.

B. Cost to Repair and the Repaired Condition

Next, Baker argues that the Court should exclude Lorenzo's opinions regarding the cost to repair the buildings' roofs and side panels, his opinion that the cost to repair them would exceed the diminution in the buildings' value, and his opinion that repaired roofs and side panels would be inferior to their pre-spill condition. These opinions are in section 5 of Lorenzo's affidavit. *See* Exhibit 2 [166-2], at 6-8.

In response, Plaintiff argues that Lorenzo did, in fact, address these issues in his deposition. Plaintiff also argues that repairing the roofs and side panels would be essentially the same as replacing them, and, therefore, Lorenzo's opinion regarding the cost of replacement is sufficient notice to Defendants of his opinions regarding

the cost of repair.

During Lorenzo's deposition, Baker's counsel asked him whether "regalvanizing" the roof panels would fix the problems allegedly caused by exposure to HCl. Exhibit C to Motion in Limine at 47, *Burroughs Diesel, Inc. v. Baker Petrolite, LLC*, No. 2:18-CV-26-KS-MTP (S.D. Miss. June 20, 2019), ECF No. 145-3. Lorenzo answered, "Yes." *Id.* But he noted that "galvanizing is . . . a process that is made during the [production] of the roof panels." *Id.* Later, counsel asked whether "repainting" the side panels would fix the problems allegedly caused by exposure to HCl. *Id.* at 49. Lorenzo answered, "It is possible, yes. You will have to sandblast, prepare the surface, and then . . . repaint the side panels. Chances are that you may not get the exact . . . same finish because as you know, those panels are factory made, not painted after they are prepared." *Id.* But he confirmed that "[w]ith the proper preparation, . . . it will . . . re-coat the panels." *Id.*

The Court closely examined Lorenzo's report, the transcript of his deposition, and the exhibits referred to in each. Although he provided opinions regarding the cost to *replace* the buildings' roofs and side panels, Lorenzo did not provide any opinions regarding the cost to *repair* the buildings' roofs and side panels. Plaintiff's argument that the two costs must be essentially the same because they will require similar labor requires an inferential leap – without enough supporting testimony or evidence – that the Court declines to make. Also, Lorenzo did not testify that the quality of the repaired roofs and side panels would be inferior to their pre-spill condition. Rather,

he stated that repainting the side panels would probably not produce the “same finish.” *Id.* In fact, he explicitly affirmed that “regalvanizing” the roof panels would fix whatever problems were caused by the HCl, *id.* at 47, and that repainting the side panels would “probably” fix them. *Id.* at 49.

Therefore, the Court concludes that most of the opinions expressed in section 5 of Lorenzo’s affidavit are new, previously undisclosed opinions. As noted above, if Plaintiff wanted to supplement Lorenzo’s disclosed testimony, it was required to do so by the discovery deadline. Plaintiff first disclosed Lorenzo’s opinions regarding the cost to repair the buildings’ roofs and side panels, his opinion that the cost to repair them would exceed the diminution in the buildings’ value, and his opinion that repaired roof and side panels would be inferior to their pre-spill condition in response to Baker’s motion for summary judgment. Accordingly, the opinions were not timely disclosed.

The Court will assume the testimony is important, but allowing Lorenzo to provide the new opinions would be prejudicial to Baker. Baker was unable to question Lorenzo regarding any such opinions during his deposition, and it had no opportunity to obtain rebuttal opinions from its own experts. Moreover, there is no time to cure the prejudice because the pretrial conference is imminent. The Court will not reopen discovery at this late stage of the proceedings. At this point, the parties should be focused on preparation of a pretrial order and preparing for trial.

Finally, Plaintiff has not provided any satisfactory explanation for its failure

to timely disclose Lorenzo's opinions regarding the cost to repair the buildings' roofs and side panels, his opinion that the cost to repair them would exceed the diminution in the buildings' value, and his opinion that repaired roof and side panels would be inferior to their pre-spill condition. Therefore, the Court concludes that they should be excluded. Plaintiff is not allowed to rely on them in support or response to a motion, at a hearing, or at trial. The Court excludes the expert testimony contained in section 5 of Lorenzo's affidavit, except insofar as Lorenzo addressed "regalvanizing" and repainting during his deposition, as cited above. But Lorenzo may not say anything on the subject that he did not say during the deposition.

For these reasons, the Court **grants** Baker's Motion to Strike [174] portions of the affidavit of Plaintiff's expert, Fernando Lorenzo.

III. MOTION TO EXCLUDE TESTIMONY OF FERNANDO LORENZO [145]

Baker filed a Motion to Exclude [145] the testimony of Plaintiff's expert, Dr. Fernando Lorenzo, concerning the damages to Plaintiff's property. Baker contends that Lorenzo is unqualified to testify as an expert, and that his opinions are neither reliable nor relevant.

Rule 702 provides:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;

- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

FED. R. EVID. 702. Therefore, “when expert testimony is offered, the trial judge must perform a screening function to ensure that the expert’s opinion is reliable and relevant to the facts at issue in the case.” *Watkins v. Telsmith, Inc.*, 121 F.3d 984, 988-89 (5th Cir. 1997).

In *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 113 S. Ct. 2786, 125 L. Ed. 2d 469 (1993), the Supreme Court provided a nonexclusive list of “general observations intended to guide a district court’s evaluation of scientific evidence,” including: “whether a theory or technique can be (and has been) tested, whether it has been subjected to peer review and publication, the known or potential rate of error, and the existence and maintenance of standards controlling the technique’s operation, as well as general acceptance.” *Watkins*, 121 F.3d at 989 (punctuation omitted).

Not every guidepost in *Daubert* will necessarily apply . . . , but the district court’s preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue is no less important.

Id. at 990-91 (punctuation omitted).

Expert testimony must be supported by “more than subjective belief or

unsupported speculation.” *Paz v. Brush Eng’red Materials, Inc.*, 555 F.3d 383, 388 (5th Cir. 2009). It “must be reliable at each and every step or it is inadmissible. The reliability analysis applies to all aspects of an expert’s testimony: the methodology, the facts underlying the expert’s opinion, the link between the facts and the conclusion, *et alia*.” *Seaman v. Seacor Marine LLC*, 326 F. App’x 721, 725 (5th Cir. 2009). “Overall, the trial court must strive to ensure that the expert, whether basing testimony on professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.” *United States v. Valencia*, 600 F.3d 389, 424 (5th Cir. 2010).

But the Court’s role as gatekeeper is not meant to supplant the adversary system because “[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.” *Daubert*, 509 U.S. at 596. The Court should focus solely on the proposed expert’s “principles and methodology, not on the conclusions that they generate.” *Id.* at 595. But “nothing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence connected to existing data only by the *ipse dixit* of the expert.” *GE v. Joiner*, 522 U.S. 136, 146, 118 S. Ct. 512, 139 L. Ed. 2d 508 (1997).

In summary, the proponent of expert testimony must demonstrate that the proposed expert is qualified, that the testimony is reliable, and that it is relevant to a question of fact before the jury. *United States v. Hicks*, 389 F.3d 514, 525 (5th Cir.

2004). The proponent must prove these requirements “by a preponderance of the evidence.” *United States v. Fullwood*, 342 F.3d 409, 412 (5th Cir. 2003).

A. Qualification

First, Baker argues that Lorenzo is not qualified to provide expert testimony concerning the damage to Plaintiff’s property because he has insufficient experience, education, or training regarding HCl. In response, Plaintiff cites Lorenzo’s education and experience in the fields of metallurgy and mechanical engineering.

Rule 702 provides that an expert may be qualified by “knowledge, skill, experience, training, or education” FED. R. EVID. 702. Expert testimony “serves to inform the jury about affairs not within the understanding of the average man.” *United States v. Moore*, 997 F.2d 55, 57 (5th Cir. 1993). Therefore, “[a] district court should refuse to allow an expert witness to testify if it finds that the witness is not qualified to testify in a particular field or on a given subject.” *Wilson v. Woods*, 163 F.3d 935, 937 (5th Cir. 1999).

A proposed expert does not have to be “highly qualified in order to testify about a given issue. Differences in expertise bear chiefly on the weight to be assigned to the testimony by the trier of fact, not its admissibility.” *Huss v. Gayden*, 571 F.3d 442, 452 (5th Cir. 2009). Likewise, lack of personal experience “should not ordinarily disqualify an expert, so long as the expert is qualified based on some other factor provided by Rule 702” *United States v. Wen Chyu Liu*, 716 F.3d 159, 168 (5th Cir. 2013). Moreover, an “expert witness is not strictly confined to his area of practice,

but may testify concerning related applications; a lack of specialization does not affect the admissibility of the opinion, but only its weight.” *Id.* at 168-69. Regardless of its source, “the witness’s . . . specialized knowledge,” must be “sufficiently related to the issues and evidence before the trier of fact that the witness’s proposed testimony will help the trier of fact.” *Id.* at 167.

Baker notes that Lorenzo admitted that he has only worked on one insurance claim involving an HCl spill, and that he has no other training, experience, or education concerning HCl spills. *See* Exhibit C [145-3], at 32-33. However, Lorenzo is a metallurgist, and he has a Ph.D. in “Materials Science and Engineering.” Exhibit 2 [166-2], at 25. He has worked with insurance companies providing damage estimates to commercial property owners. Exhibit C [145-3], at 49.

The Court believes that Lorenzo has sufficient education and experience to provide expert testimony regarding the damage to Plaintiff’s property caused by the HCl spill. His expertise in mechanical engineering and metallurgy is applicable to the issues presented here, and he has experience providing damage estimates on commercial properties. His admitted lack of specific experience with HCl goes to the weight of his testimony, rather than its admissibility.

B. Reliability

Next, Baker argues that Lorenzo’s opinions are not reliable. The reliability of proposed expert testimony “is determined by assessing whether the reasoning or methodology underlying the testimony is scientifically valid.” *Knight v. Kirby Inland*

Marine, Inc., 482 F.3d 347, 352 (5th Cir. 2007). As noted above, “the expert’s testimony must be reliable at each and every step or it is inadmissible.” *Seaman*, 326 F. App’x at 725. Baker made several arguments regarding the reliability of Lorenzo’s opinions. The Court will address each in turn.

1. *Errors in Report*

First, Baker argues that Lorenzo’s opinions regarding the damage to Plaintiff’s property are unreliable because his report includes several factual errors. Lorenzo admitted the errors during his deposition and corrected them. Exhibit C [145-3], at 27-29. “[A] few scattered errors in an expert report are not necessarily grounds for exclusion,” particularly where the expert admitted the errors and corrected them during discovery. *Moore v. Int’l Paint, LLC*, 547 F. App’x 513, 516 (5th Cir. 2013); *cf. Marsh v. Wallace*, 2008 WL 4000809, at *6-*7 (S.D. Miss. Aug. 22, 2008) (in bench trial, court declined to exclude expert’s opinions because of errors in figures). Baker is free to cross-examine Lorenzo regarding the errors, but the Court will not exclude his opinions on this basis alone.

2. *Loss of Useful Life – Roofs*

Next, Baker argues that the Court should exclude all of Lorenzo’s opinions regarding the loss of useful life to the roofs on Plaintiff’s metal buildings. The roofing panels were made of galvanized steel, which is steel coated with zinc. Lorenzo stated that the HCl vapors eroded the zinc coating on the roofing panels, reducing their useful life. Baker asserted several arguments as to why the Court should exclude

Lorenzo's opinions on this issue. The Court will address each one.

i. Personal Inspection & Reliance on Third Party Data

First, Baker argues that the Court should exclude Lorenzo's opinions regarding the roofs' loss of useful life because he did not personally inspect them. Instead, he relied on data gathered by another expert. "A personal examination of the person or object of the expert's testimony is not required under" the Rules of Evidence. *Peteet v. Dow Chem. Co.*, 868 F.2d 1428, 1432 (5th Cir. 1989). "[E]xperts often rely on facts and data supplied by third parties." *Bryan v. John Bean Division of FMC Corp.*, 566 F.2d 541, 545 (5th Cir. 1978). In short, the Court's chief concern is the data's sufficiency to support the expert's conclusions, rather than its source. This issue goes to the weight of the testimony, rather than its admissibility.

ii. Testing

Next, Baker argues that the Court should exclude Lorenzo's opinions regarding the roofs' loss of useful life because he did not perform any testing to determine the thickness of the zinc coating on the metal panels. Based on his knowledge of industry standards, Lorenzo initially assumed that the roofing panels had a zinc coating consistent with "G60" panels. Exhibit C [145-3], at 27; Exhibit 2 [166-2], at 4. He then applied an equation based on the chemical reaction between HCl and zinc to determine how much of the zinc would have been consumed by HCl. Exhibit 2 [166-2], at 3. He used a pH level consistent with some of the third-party samples taken from the scene. *Id.* Lorenzo later confirmed that the panels were "G60" panels, but he

learned (from Baker's expert) that the zinc coating on "G60" panels was thinner than he had originally believed. *Id.* at 4. He revised his calculations accordingly. *Id.*; Exhibit C [145-3], at 27.

An expert's failure to conduct testing does not necessarily render his opinion unreliable. *See, e.g. United States v. Garcia-Vargas*, 667 F. App'x 491, 492 (5th Cir. 2016) (district court did not err in admitting expert testimony that litigant argued should have been tested more); *Barnett v. Deere & Co.*, 2016 WL 6652750, at *2 (S.D. Miss. Nov. 10, 2016) (expert not required to test alternative design in product liability case); *Hankins v. Ford Motor Co.*, 2011 WL 6046304, at *4 (S.D. Miss. Dec. 5, 2011) (expert was not required to test his opinions for them to be admissible). Here, Lorenzo's determinative process was logical and based on fundamental chemistry. His failure to conduct testing to confirm the loss of zinc coating goes to the weight of his testimony, rather than its admissibility.

iii. Factual Basis & Connection to Conclusion

Finally, Baker presented several arguments which challenge the factual basis of Lorenzo's opinions, as well as the connection between those facts and Lorenzo's conclusions. First, Baker argues that Lorenzo relied upon insufficient data to form his opinions. Lorenzo relied on samples taken by Richard Edwards, an engineer hired by Travelers. Edwards only took twelve usable samples from the Plaintiff's property, and only six of the samples were from roofs. Exhibit E to Motion to Exclude at 43, *Burroughs Diesel, Inc. v. Baker Petrolite, LLC*, No. 2:18-CV-26-KS-MTP (S.D. Miss.

June 20, 2019), ECF No. 145-5. Beyond cursory descriptions in the chart Edwards provided, Lorenzo did not know where the samples were taken. Exhibit C [145-3], at 40-42. Also, Edwards only confirmed or denied the presence of chlorides, an indicator of HCl exposure, and Lorenzo did not know the concentration of chlorides in any sample. Exhibit E [145-5], at 43; Exhibit C [145-3], at 61.

Next, Baker argues that Lorenzo improperly extrapolated Edwards' incomplete sampling data to all roofs on Plaintiff's property. In other words, Baker argues Lorenzo assumed that every metal roof on Plaintiff's property was exposed to the same concentration of HCl, based on a limited number of data points. In fact, Lorenzo acknowledged this inferential leap in his report, noting that Edwards' data "clearly confirms that . . . almost every surface . . . was exposed to the highly corrosive effect of the Hydrochloric Acid vapors released from Baker Petrolite." Exhibit B to Motion in Limine at 6, *Burroughs Diesel, Inc. v. Baker Petrolite, LLC*, No. 2:18-CV-26-KS-MTP (S.D. Miss. June 20, 2019), ECF No. 145-2. He took the inference a step further when calculating the roofs' loss of zinc coating. Lorenzo assumed that the roofs were exposed to HCl solution with a pH value of 1.0, *id.* at 7, but Edwards only recorded a single sample with a pH value of 1.0 – from the surface of an ice machine, rather than from a roof. Exhibit E [145-5], at 43.

Finally, Baker argues that Lorenzo's opinion regarding the roofs' loss of useful life is complete speculation. Lorenzo assumed that the reduction in the useful life of the metal roofing panels was equal to his calculated reduction in the zinc coating on

the panels, without articulating any methodology or reasoning to support such an inference. Exhibit B [145-2], at 7.

In response to these issues with Lorenzo's testimony, Plaintiff notes that Lorenzo's opinions regarding the roofs' loss of useful life are supported by calculations based on samples taken from the site, known chemical reactions between zinc and HCl, and the undisputed thickness of the zinc coating on the steel roofing panels. Plaintiff contends that Baker's problems with Lorenzo's testimony are just "fodder for cross-examination," rather than grounds for exclusion.

Rule 702 specifically requires that an expert's testimony be based upon sufficient facts or data. FED. R. EVID. 702(b). Phrased differently, proposed expert testimony "must be supported by appropriate validation – i.e. good grounds, based on what is known." *Daubert*, 509 U.S. at 509 (punctuation omitted). "Where an expert's opinion is based on insufficient information, the analysis is unreliable." *Paz*, 555 F.3d at 388; *see also Seaman*, 326 F. App'x at 725. Therefore, expert testimony must be supported by "more than subjective belief or unsupported speculation." *Paz*, 555 F.3d at 300. "Although the *Daubert* reliability analysis is flexible and the proponent of expert testimony need not satisfy every one of its factors, the existence of sufficient facts is . . . in all cases mandatory," *Moore*, 547 F. App'x at 515, and "a district court has broad discretion to determine whether a body of evidence relied upon by an expert is sufficient to support that expert's opinion." *Knight*, 482 F.3d at 354. "Overall, the trial court must strive to ensure that the expert, whether basing testimony on

professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.” *Valencia*, 600 F.3d at 424.

Moreover, while “reliable expert testimony often involves estimation and reasonable inferences from a sometimes incomplete record,” an expert may not make “numerous assumptions with no apparent underlying rationale.” *Moore*, 547 F. App’x at 516. Experts can build up to conclusions through basic scientific premises, but “the extrapolation or leap . . . must be reasonable and scientifically valid.” *Moore*, 151 F.3d at 279. “[C]ourts are free to reject a theory based on extrapolation when ‘there is simply too great an analytical gap between the data and the opinion proffered.’” *Johnson v. Arkema, Inc.*, 685 F.3d 452, 460-61 (5th Cir. 2012) (quoting *Joiner*, 522 U.S. at 146). As noted above, “nothing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence connected to existing data only by the *ipse dixit* of the expert.” *Joiner*, 522 U.S. at 146.

Here, Plaintiff has not offered any substantial opposition to Baker’s argument. Plaintiff doesn’t dispute that Lorenzo based his opinions regarding the metal roofs on a limited number of samples from a variety of surfaces throughout Plaintiff’s property. Likewise, Plaintiff does not dispute that Lorenzo doesn’t know where the samples were taken or the concentration of chlorides in each sample.

Even if the Court agreed with Plaintiff that the problems with the data go to the weight of Lorenzo’s testimony, rather than its admissibility, his conclusions still

rest on various unsupported inferences and extrapolations. He assumed that the HCl exposure level of every metal roof was at least the same as that of an ice machine. He reasoned that the roofs would have actually received *more* exposure to HCl than the ice machine because they were not under cover, and that the ice machine sample had a lower pH than the roof samples because the roofs had been exposed to rain during the two weeks between the spill and Edwards' inspection. Lorenzo also assumed that the reduction in the useful life of the metal roofing panels was equal to his calculated reduction in the zinc coating on the panels, without articulating any methodology or reasoning to support such an inference.

The Court finds that Lorenzo's opinions regarding the remaining useful life of the metal roofing panels is unreliable because of the combination of 1) their sketchy factual basis, and 2) Lorenzo's unsupported inferences and extrapolations from the already limited facts. The Court grants Baker's motion as to this issue.

3. Loss of Useful Life – Side Panels

Next, Baker argues that the Court should exclude Lorenzo's opinions regarding the loss of useful life of the side panels on Plaintiff's metal buildings. First, Baker argues that Lorenzo based his opinion on insufficient data. As noted above, Lorenzo relied on samples taken by Richard Edwards, a consultant hired by Travelers. Edwards only took twelve usable samples from Plaintiff's property, and Lorenzo doesn't know whether any of them are from the side panels of Plaintiff's metal buildings. Exhibit E [145-5], at 43; Exhibit C [145-3], at 40-42. Regardless, Edwards

only confirmed or denied the presence of chlorides, an indicator of HCl exposure, and Lorenzo doesn't know the concentration of chlorides at any specific location on the property. Exhibit E [145-5], at 43; Exhibit C [145-3], at 61.

Baker also argues that Lorenzo's opinions on the side panels are unreliable because he relied on a single unreliable source. During his deposition, Lorenzo admitted that the only basis for his opinion that the painted metal side panels had lost 50% of their useful life was an article from www.hunker.com, a do-it-yourself home repair website. Exhibit C [145-3], at 47-48. The record contains no evidence that this is the sort of authority typically relied on by experts in the fields of metallurgy and/or mechanical engineering. *See Valencia*, 600 F.3d at 424.

Finally, Baker notes that Lorenzo provided no basis whatsoever for his assumption that the side panels had lost 50% of their useful life. With respect to the roofs, he performed calculations based on the chemical reaction between HCl and zinc. He performed no such calculation with respect to the paint on the side panels, and expressed no opinion as to the amount of paint eroded by HCl. He noted that some paints include metal compounds, and, therefore, he assumed that the HCl would react with the paint in the same way it theoretically reacted with the zinc on the roofing panels. Exhibit C [145-3], at 66. But he did not identify any metal compounds in the paint on the side panels or perform calculations as he did with the roofing panels. He assumed that there were metals in the paint and pulled a number out of thin air as to the amount of paint eroded by HCl. *See id.* at 48, 66. Then he

assumed – without articulating any supporting methodology or rationale – that a loss of 50% of the paint would cause a 50% loss in the useful life of the side panels.

The Court excludes Lorenzo’s opinion regarding the loss of useful life of the metal buildings’ side panels because 1) he failed to demonstrate that the single source he relied on in support of his opinion was the sort typically relied on by experts in his field, and 2) his failure to articulate a methodology or rationale in support of opinions regarding the amount of paint eroded and loss of useful life. The Court grants Baker’s motion as to this issue.

4. Cost to Replace Tools and Equipment

Next, Baker argues that the Court should exclude Lorenzo’s opinion that “approximately 70% of the tools and components included in [Plaintiff’s] list would require replacement as a result of having been exposed to Acid attack.” Exhibit B [145-2], at 8.

Lorenzo did not personally observe any HCl damage on any tool or equipment. In preparing his report, he relied on photographs of tools and equipment taken by other experts that showed corrosion, rust, and pitting on various metal tools, equipment, and components. Exhibit C [145-3], at 63-64. He also testified that Plaintiff provided a list of tools and equipment that were not damaged before the spill, but had to be replaced after the spill. *Id.* at 51, 63-64.

Lorenzo explained that tools made with chrome plating or stainless steel would be susceptible to damage if exposed to HCl. He testified that “exposure to hydrochloric

acid vapors will induce some corrosion and possible failures due to stress corrosion cracking” Exhibit C [145-3], at 49. But he could not identify any specific tool with “stress corrosion cracking.” *Id.* at 49-50. He admitted that he did not inspect any tools or equipment. *Id.* at 50. Instead, Lorenzo assumed that everything on the property was exposed to HCl vapor because the Edwards report “indicated that most of – or all the surfaces . . . have traces of chloride.” *Id.* at 52. According to Lorenzo, “[t]hat is confirmation that hydrochloric acid was in contact with most of the surfaces of the . . . Burroughs facility,” and such contact can cause corrosion in stainless steel and chrome tools, as well as electrical and electronic components. *Id.*

The Court denies this aspect of Baker’s motion. Lorenzo’s opinion rests on reasonable – yet not perfect – premises and data. Unlike his opinions regarding the loss of useful life of the metal roofing and side panels, there is no massive gap between steps in his reasoning process. The biggest hole in his reasoning is the assumption that HCl touched everything on the property, but he apparently shares that opinion with Edwards, another party’s expert. Moreover, photographs taken by Edwards confirm corrosion and/or rust on some of the tools and equipment, and Plaintiff’s descriptions of equipment failures and tool damage is consistent with HCl exposure, as described by Lorenzo. Neither Lorenzo’s failure to personally inspect every tool, nor his reliance on information provided to him by Plaintiff are fatal to his analysis. Rather, these are all matters to be addressed in cross-examination, and the jury is free to weigh them as it deems fit.

5. *Repair Invoices/Estimates*

Finally, Baker argues that the Court should exclude Lorenzo's opinions regarding various other repair costs already incurred by Plaintiff.

i. Generators

Baker argues that the Court should exclude Lorenzo's opinion that Plaintiff's repairs to generators were related to the HCl spill because Lorenzo did not personally observe any damage to the generators. The repairs had already been performed when he inspected the generators. Exhibit C [145-3], at 55.

Plaintiff did not direct the Court to any specific testimony or record evidence regarding the basis of Lorenzo's opinion that the damage to the generators was caused by the HCl spill. Plaintiff cites Lorenzo's general testimony regarding the effect of HCl on electric and electronic components. *See id.* at 49-53. Lorenzo apparently relied on what Plaintiff told him about the condition of the generators before they were repaired. However, Lorenzo's deposition transcript contains no mention of that predicate information. The Court doesn't know what Plaintiff told Lorenzo about the generators' condition before repairs, or how Lorenzo then drew the conclusion that the problems were caused by the HCl spill. Therefore, the Court concludes that Plaintiff has not carried its burden of demonstrating that Lorenzo's opinion regarding the damage to the generators is reliable.

ii. Wrecker Trucks

Next, Baker argues that the Court should exclude any opinion from Lorenzo

about repairs to the wrecker trucks being related to the HCl spill. Lorenzo denied having inspected any wrecker trucks, and he testified that he had no opinion regarding the cause of any damage to them. *Id.* at 55; Exhibit G to Motion to Exclude at 3-4, *Burroughs Diesel, Inc. v. Baker Petrolite, LLC*, No. 2:18-CV-26-KS-MTP (S.D. Miss. June 20, 2019), ECF No. 145-7. Lorenzo specifically denied having formed any opinion regarding the cause of any alleged damage to the wrecker trucks. Therefore, the Court grants this aspect of Baker's motion.

iii. Tires/Equipment in Wrecker Building

Baker also argues that the Court should exclude any opinion from Lorenzo that Plaintiff's replacement of tires on equipment/vehicles in the wrecker building was caused by exposure to HCl. Lorenzo denied having any opinion regarding the cause of any damage to the tires on vehicles and/or equipment in the wrecker building. Exhibit C [145-3], at 55; Exhibit G [145-7], at 3-4. Therefore, the Court grants this aspect of Baker's motion.

iv. Tires on Forklifts

Baker argues that the Court should exclude any opinion from Lorenzo that Plaintiff had to replace the tires on the forklifts because of the HCl spill. Lorenzo denied having any opinion regarding the cause of any damage to the tires on the forklift. Exhibit C [145-3], at 55; Exhibit G [145-7], at 3-4. Therefore, the Court grants this aspect of Baker's motion.

v. Miscellaneous

Plaintiff's list of damages includes a list of "Miscellaneous Repairs/Quotes for Damages." See Exhibit B to Motion for Summary Judgment at 5-6, *Burroughs Diesel, Inc. v. Baker Petrolite, LLC*, No. 2:18-CV-26-KS-MTP (S.D. Miss. June 20, 2019), ECF No. 147-2. Baker argues that the Court should exclude any testimony from Lorenzo that the damage to these items was caused by the HCl spill. Lorenzo admitted that he did not personally inspect the listed equipment. Exhibit C [145-3], at 55. He only viewed repair invoices and relied on what Plaintiff told him. In response, Plaintiff cites Lorenzo's general testimony regarding the effect of HCl on electric and electronic components. See *id.* at 49-53.

With respect to the replacement of halogen light kits, see Exhibit G [145-7], at 5, Lorenzo testified that Plaintiff told him that the halogen lights started having "accelerated failures" that were consistent with the corrosion of electric and electronic components Lorenzo described earlier in the deposition. Exhibit C [145-3], at 55. This is sufficient to admit the testimony. Baker is free to cross-examine Lorenzo regarding his lack of any first-hand observation of the damage to the lights.

However, with respect to the remaining items listed in the miscellaneous section of the damage list – HVAC, surveillance system, electrical and machine repairs, cable replacement, forklift and loader repair – Plaintiff has not provided any evidence of the predicate information relied upon by Lorenzo in forming his opinions. The Court doesn't know what Plaintiff told Lorenzo about the items' conditions before

repairs, or how Lorenzo then drew the conclusion that the problem was caused by the HCl spill. Therefore, the Court concludes that Plaintiff has not carried its burden of demonstrating that Lorenzo's opinion regarding the damage to the remaining miscellaneous items is reliable.

C. *Relevance*

Finally, Baker argues that Lorenzo's opinion regarding the cost to remove and replace the roofs and side panels on the metal buildings is irrelevant. Baker notes that Lorenzo testified that the roofs could be re-galvanized and the side panels repainted. *See* Exhibit C [145-3], at 47, 49. Therefore, Baker argues that Lorenzo's opinion regarding the cost to remove and replace the roofs and side panels is irrelevant because he did not demonstrate that replacement is necessary.

The Court denies this aspect of Baker's motion. Although replacement of the roofs and side panels may not be necessary, it may nevertheless be prudent and/or desirable, depending on the extent and nature of the damage to the existing panels.¹ The fact that the damage can be repaired does not remove replacement from the table as an option.

IV. MOTION TO EXCLUDE TESTIMONY OF CRADDOCK AND LORENZO [137]

Defendant Poly Processing Company, LLC ("Poly") filed a Motion to Exclude [137] certain testimony from Plaintiff's experts, Roger Craddock and Fernando Lorenzo. For the reasons below, the Court **denies** the motion.

¹ See the Court's discussion below regarding the measure of damages in actions for damage to real property.

A. Testimony Re: Manufacturing Defect

First, Poly argues that Plaintiff did not disclose any expert opinions related to the product liability claims asserted against it. In Count Six of the Complaint, Plaintiff asserted claims governed by the Mississippi Products Liability Act (“MPLA”).² Complaint at 13-14, *Burroughs Diesel, Inc. v. Baker Petrolite, LLC*, No. 2:18-CV-26-KS-MTP (S.D. Miss. Feb. 21, 2018), ECF No. 1. Specifically, Plaintiff alleged that tank holding the HCl was defectively manufactured. *Id.*³

To succeed on a manufacturing defect claim, a plaintiff must show, at the time the product left the control of the manufacturer or seller: (1) the product deviated in a material way from the manufacturer’s specifications or from otherwise identical units manufactured to the same manufacturing specifications; (2) the defective condition rendered the product unreasonably dangerous to the user or consumer; and (3) the defective and unreasonably dangerous condition of the product proximately caused the damages for which recovery is sought. MISS. CODE ANN. § 11-1-63(a).

Lorenzo and Craddock stated in their report that “the crack in the bottom of the tank was a large semi-elliptical fatigue crack that initiated at a manufacturing flaw in the tank’s bottom.” Exhibit F at 13, *Burroughs Diesel, Inc. v. Baker Petrolite, LLC*, No. 2:18-CV-26-KS-MTP (S.D. Miss. June 12, 2019), ECF No. 135-6. Later in

² Plaintiff argues that all of his claims against Poly are not governed by the MPLA. The Court will address this issue in more detail below, but Plaintiff is mistaken.

³ Plaintiff also alleged that the tank was defectively designed, but it conceded the design defect claim in response to Poly’s motion for summary judgment. *See* Response to Motion for Summary Judgment at 7, *Burroughs Diesel, Inc. v. Baker Petrolite, LLC*, No. 2:18-CV-26-KS-MTP (S.D. Miss. July 3, 2019), ECF No. 161.

the report, they described the “origin of the crack/rupture” as a “small void in the plastic that resulted from a casting defect” *Id.* at 15. According to Lorenzo and Craddock, the “tank’s rupture originated from a weak area in the bottom of the tank and grew over time when the tank was pressurized during filling.” *Id.*

Lorenzo echoed this opinion during his deposition. He testified that the “initial void was – basically a pore spherical defect in the tank that eventually, due to the overstress, it would develop into a crack. And then it started growing.” Exhibit C [145-3], at 5. Lorenzo affirmed that but for the void in the bottom in the tank, the crack would not have developed. *Id.* at 4. But he also admitted that no crack would have initiated from the void under “normal loading conditions.” *Id.* at 6.

Craddock confirmed during his deposition that to initiate a crack, there would had to have been both over-pressurization and an “anomaly in the tank.” Exhibit C to Motion for Summary Judgment at 5, *Burroughs Diesel, Inc. v. Baker Petrolite, LLC*, No. 2:18-CV-26-KS-MTP (S.D. Miss. June 12, 2019), ECF No. 135-3. He explicitly testified: “[A]bsent the void there, under the circumstances or the exposure of this tank, the cracks should not have occurred.” *Id.* But he also testified that the tank would not have failed but for over-pressurization/over-filling. *Id.* at 5-6, 24. He explained:

There is an anomaly in the bottom of the tank. The tank has an overpressure that occurs sufficient enough to initiate the crack at that anomaly. And once you start the crack at that time, you’ve got less strength, less availability to resist pressures being applied to the tank itself.

And so as you continue to use the tank, whether you overfill it, whether you don't overfill it, but what occurs is over the exposure to the hydrostatic pressure and any other potential pressures internal to the tank, the crack begins to manifest and it grows.

As it grows, it gets weaker and weaker and weaker until at some point it's going to go all the way through to rupture, which is what occurred here.

Id. at 6.

These opinions regarding an air bubble or void in the polyethylene storage tank are relevant to Plaintiff's manufacturing defect claim. Craddock and Lorenzo testified that a crack would not have formed in the tank but for the air bubble, an alleged manufacturing defect. Therefore, the Court rejects the premise of Poly's argument. Plaintiff has, in fact, disclosed opinions from Lorenzo and Craddock regarding the existence of a manufacturing defect.

B. Qualification

Next, Poly argues that neither Lorenzo nor Craddock are qualified to offer an opinion that an alleged manufacturing defect caused the tank to rupture. As noted above, Rule 702 provides that an expert may be qualified by "knowledge, skill, experience, training, or education" FED. R. EVID. 702. But a proposed expert does not have to be "highly qualified in order to testify about a given issue. Differences in expertise bear chiefly on the weight to be assigned to the testimony by the trier of fact, not its admissibility." *Huss*, 571 F.3d at 452; *see also Williams v. Manitowoc Cranes, LLC*, 898 F.3d 607, 623-24 (5th Cir. 2018). Lack of personal experience is not disqualifying, as long as "the expert is qualified based on some other factor provided

by Rule 702” *Wen Chyu Liu*, 716 F.3d at 168. Likewise, expert witnesses are not “strictly confined to [their] area of practice, but may testify concerning related applications; a lack of specialization does not affect the admissibility of the opinion, but only its weight.” *Id.* at 168-69. “[T]he witness’s . . . specialized knowledge,” must be “sufficiently related to the issues and evidence before the trier of fact that the witness’s proposed testimony will help the trier of fact.” *Id.* at 167.

Lorenzo is a metallurgist, and he has a Ph.D. in “Materials Science and Engineering.” Exhibit 2 [166-2], at 25. Moreover, Poly admits that Lorenzo is qualified to offer the opinions in the expert report dated March 26, 2019. Exhibit F [135-6]. As explained above, the report contains opinions that a manufacturing defect – the air bubble, or void – was a proximate cause of the HCl spill. Therefore, the Court believes that Lorenzo has sufficient education to provide expert testimony regarding the cause of the HCl spill – specifically, that the air bubble or void in the tank was a proximate cause of the spill. His expertise in mechanical engineering and metallurgy is applicable to the issues presented here. His admitted lack of specific experience with polyethylene tanks goes to the weight of his testimony, rather than its admissibility.

Craddock has a B.S. in Civil Engineering, and he has been a practicing engineer, licensed in multiple states, for over fifty years. Exhibit F [135-6], at 60-61. He “specializes in failure analysis and accident investigation in matters involving petrochemical, natural gas and propane facilities, petroleum refineries, oil field and

pipeline operations, marine and offshore structures, and heavy construction.” *Id.* at 60. He has investigated thousands of industrial incidents, *id.* at 60, 63-64, including approximately one hundred “tank failures” and at least a dozen polyethylene “tank failures.” Exhibit C [135-3], at 3. Finally, Poly admits that Craddock is qualified to offer the opinions in the report dated March 26, 2019, and the report clearly states that a manufacturing defect – the air bubble, or void – was a proximate cause of the HCl spill. Therefore, the Court concludes that Craddock has sufficient education and experience to provide expert testimony that the air bubble or void in the tank was a proximate cause of the spill. His lack of specific experience designing and/or manufacturing polyethylene tanks goes to the weight of his testimony, rather than its admissibility.

For these reasons, the Court **denies** Poly’s Motion to Exclude [137] certain testimony by Plaintiff’s proposed experts, Fernando Lorenzo and Roger Craddock.⁴

V. MOTION TO EXCLUDE TESTIMONY OF GALE HOFFNAGLE [140]

Plaintiff filed a Motion to Exclude [140] certain testimony by Gale Hoffnagle, Baker’s proposed meteorology expert. For the reasons provided below, the Court **denies** the motion.

A. *Qualification*

First, Plaintiff argues that Hoffnagle is not qualified to offer any opinions

⁴ Poly’s reply brief contains arguments regarding the disclosure and reliability of Craddock’s opinions regarding Poly’s inspections during the manufacturing process. These arguments were not presented in Poly’s initial brief. Therefore, the Court will not address them. *Wallace v. County of Comal*, 400 F.3d 284, 292 (5th Cir. 2005).

estimating the concentration of HCl in the vapor cloud produced by the spill, the chemical effect of water vapor and/or soda ash on the HCl vapor cloud, or the effect of the HCl vapor cloud on Plaintiff's property. The Court disagrees.

Baker presented Hoffnagle's affidavit, in which he claims to have "practiced atmospheric chemistry for the past fifty years." Exhibit A to Response at 1, *Burroughs Diesel, Inc. v. Baker Petrolite, LLC*, No. 2:18-CV-26-KS-MTP (S.D. Miss. July 1, 2019), ECF No. 156-1. He is also a "member of the American Institute of Chemical Engineers," and he studied atmospheric chemistry at New York University, including graduate work. *Id.* at 2. Finally, his undisputed qualifications in the field of meteorology are applicable to these issues. Therefore, the Court concludes that Hoffnagle has sufficient education and experience to provide expert testimony regarding the concentration of HCl in the vapor cloud produced by the spill, and the chemical effect of water vapor and/or soda ash on the HCl vapor cloud. Plaintiff's objections to his qualifications go to the weight of his testimony, rather than its admissibility. As for the effect of the HCl vapor cloud on Plaintiff's property, Plaintiff has not identified – and the Court has not seen – any opinions from Hoffnagle regarding the alleged damage to Plaintiff's property. Therefore, Plaintiff's objection on this point is moot.

B. Reliability

Next, Plaintiff argues that Hoffnagle's opinions regarding the strength and concentration of HCl in the vapor cloud are unreliable. Specifically, Plaintiff argues

that Hoffnagle admitted that he did not know the rate and duration of the HCl spill, or the size of the vapor cloud. Accordingly, Plaintiff contends that Hoffnagle has no way of accurately calculating whether the concentration of the HCl was reduced by water vapor or soda ash.

Hoffnagle intends to testify that “[e]vaporation of the acid into the saturated air created the cloud and reduced the strength of the released acid through the addition of atmospheric water vapor into the cloud. The strength of the acid in the air would also have been reduced by the use of soda ash to neutralize the acid.” Exhibit B to Motion to Exclude at 8, *Burroughs Diesel, Inc. v. Baker Petrolite, LLC*, No. 2:18-CV-26-KS-MTP (S.D. Miss. June 17, 2019), ECF No. 140-2. In support of this opinion, he acknowledged that the rate and duration of HCl discharge is unknown. *Id.* at 7. He noted that “evaporation of hydrochloric acid into the air is a non-trivial calculation because of the competing evaporation of water and hydrogen chloride” in the HCl solution. *Id.* However, he stated that evaporation occurred because “a cloud appear[ed] in the air.” *Id.* “As the evaporate rises it meets the atmosphere which is completely saturated, 100% relative humidity Thus, the water vapor in the air is being added to the cloud,” which “will reduce the strength of the HCl in the air . . . by an unknown amount.” *Id.* at 7-8. Likewise, “the 89 bags of soda ash used to neutralize the acid” would have also reduced the acid concentration by an unknown amount. *Id.* at 8.

The Court concludes that Hoffnagle’s opinions are reliable, as far as they go.

He didn't attempt to calculate the specific concentration of the HCl in the vapor cloud or propose that water vapor and soda ash reduced the concentration by a specific amount. He only stated that water vapor and soda ash would have reduced the concentration by an unknown amount. His reasoning is sound, and it supports his limited conclusions.

VI. MOTION TO EXCLUDE TESTIMONY OF JAMES KOERBER [142]

Plaintiff filed a Motion to Exclude [142] certain testimony by Baker's expert, James Koerber. Specifically, Plaintiff argues that the Court should exclude Koerber's opinion that the metal buildings' alleged loss of value will be realized in the future and, therefore, should be discounted to present value. Plaintiff contends that the opinion is both irrelevant and unreliable.

The Court **denies** this motion **as moot**. As explained below, Plaintiff can not meet its burden of proving the amount of damage to the metal buildings with reasonable certainty, and the Court grants Baker's motion for summary judgment as to that element of damages. Therefore, the Court assumes Baker will not offer Koerber's testimony on this issue, and the Court need not address Plaintiff's arguments.

VII. MOTION FOR SUMMARY JUDGMENT AS TO POLY [135]

Defendant Poly filed a Motion for Summary Judgment [135] as to Plaintiff's claims against it. In Count Six of the Complaint, Plaintiff asserted product liability claims against Poly. Plaintiff contends that Poly negligently manufactured and/or

designed the polyethylene tank that contained the HCl. Specifically, Plaintiff alleges that the tank had a “void in the bottom of the tank . . . which weakened this area below the required design capacity and made this weakened area likely to rupture and explode from pressurization and/or over-pressurization.” Complaint [1], at 13. Poly contends that Plaintiff does not have enough evidence to support its claims.

Rule 56 provides that “[t]he court shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” FED. R. CIV. P. 56(a); *see also Sierra Club, Inc. v. Sandy Creek Energy Assocs., L.P.*, 627 F.3d 134, 138 (5th Cir. 2010). “Where the burden of production at trial ultimately rests on the nonmovant, the movant must merely demonstrate an absence of evidentiary support in the record for the nonmovant’s case.” *Cuadra v. Houston Indep. Sch. Dist.*, 626 F.3d 808, 812 (5th Cir. 2010) (punctuation omitted). The nonmovant “must come forward with specific facts showing that there is a genuine issue for trial.” *Id.* “An issue is material if its resolution could affect the outcome of the action.” *Sierra Club*, 627 F.3d at 138. “An issue is ‘genuine’ if the evidence is sufficient for a reasonable jury to return a verdict for the nonmoving party.” *Cuadra*, 626 F.3d at 812.

The Court is not permitted to make credibility determinations or weigh the evidence. *Deville v. Marcantel*, 567 F.3d 156, 164 (5th Cir. 2009). When deciding whether a genuine fact issue exists, “the court must view the facts and the inference to be drawn therefrom in the light most favorable to the nonmoving party.” *Sierra*

Club, 627 F.3d at 138. However, “[c]onclusional allegations and denials, speculation, improbable inferences, unsubstantiated assertions, and legalistic argumentation do not adequately substitute for specific facts showing a genuine issue for trial.” *Oliver v. Scott*, 276 F.3d 736, 744 (5th Cir. 2002).

A. “Negligent Manufacturing”

In response to Poly’s motion, Plaintiff argues that it asserted a “common law negligence” claim against Poly which was not subsumed by the Mississippi Products Liability Act (“MPLA”). The MPLA “provides the exclusive remedy in any action for damages caused by a product against a product manufacturer, designer, or seller.” *Funches v. Progressive Tractor & Implement Company, LLC*, 905 F.3d 846, 850 (5th Cir. 2018) (citing *Elliott v. El Paso Corp.*, 181 So. 3d 263, 270 (Miss. 2015); MISS. CODE ANN. § 11-1-63(a)) (punctuation omitted). Accordingly, the Mississippi Supreme Court has held that the “MPLA has abrogated products-liability claims based on strict-liability or negligence theories” *Elliott*, 181 So. 3d at 268. Therefore, as all of Plaintiff’s “negligence . . . claims are based on the damages purportedly caused by alleged defects in the” polyethylene tank, the Court “must analyze those claims under the MPLA.” *Id.* at 269.⁵

B. Design Defect

Next, Poly argues that Plaintiff has no evidence of a design defect in the HCl

⁵ *Joiner v. BCAM Self-Insurer’s Fund*, No. 1:09-CV-93-GHD-DAS, 2012 WL 567201, at *2-*3 (N.D. Miss. Feb. 21, 2012), cited by Plaintiff, is inapplicable because it pre-dates the Mississippi legislature’s 2014 amendment of the MPLA. See *Funches*, 905 F.3d at 850; *Elliott*, 181 So. 3d at 268.

tank. Plaintiff conceded this claim in its response to Poly’s motion. Therefore, the Court grants Poly’s motion with respect to any design defect claim against Poly asserted in the Complaint.

C. *Manufacturing Defect*

Poly also argues that Plaintiff has insufficient evidence to support a manufacturing defect claim.

1. Defect

First, Poly argues that Plaintiff has no evidence that the HCl tank had a “defective condition,” as required by the MPLA. When a plaintiff asserts a manufacturing defect claim:

The manufacturer . . . of the product shall not be liable if the claimant does not prove by the preponderance of the evidence that at the time the product left the control of the manufacturer . . . :

- (i) . . . The product was defective because it deviated in a material way from the manufacturer’s . . . specifications or from otherwise identical units manufactured to the same manufacturing specifications, . . . ; and
- (ii) The defective condition rendered the product unreasonably dangerous to the user or consumer; and
- (iii) The defective and unreasonably dangerous condition of the product proximately caused the damages for which recovery is sought.

MISS CODE ANN. § 11-1-63(a).

Poly argues that Plaintiff has no evidence that the tank “deviated in a material way from the manufacturer’s . . . specifications or from otherwise identical units

manufactured to the same manufactured specifications” MISS. CODE ANN. § 11-1-63(a)(i)(1). However, the record contains evidence of a “small void in the plastic that resulted from a casting defect” in the polyethylene tank. *See* Exhibit F [135-6], at 15. Both Plaintiff’s experts and Baker’s expert noted the defect. *See* Exhibit B to Response at 25, *Burroughs Diesel, Inc. v. Baker Petrolite, LLC*, No. 2:18-CV-26-KS-MTP (S.D. Miss. Aug. 14, 2019), ECF No. 182-2; Exhibit F [135-6], at 15. The record contains evidence that Poly conducts testing on tanks after they are manufactured to identify such flaws in tanks after casting. Exhibit C [135-3], at 21; Exhibit B to Motion for Summary Judgment at 5, *Burroughs Diesel, Inc. v. Baker Petrolite, LLC*, No. 2:18-CV-26-KS-MTP (S.D. Miss. June 12, 2019), ECF No. 135-2; Exhibit A to Motion for Summary Judgment at 38, *Burroughs Diesel, Inc. v. Baker Petrolite, LLC*, No. 2:18-CV-26-KS-MTP (S.D. Miss. June 12, 2019), ECF No. 135-1. If Poly finds a bubble in the tank, it repairs it, as necessary and possible. Exhibit B [135-2], at 5.

This evidence creates a genuine dispute of material fact as to whether the tank at issue in this case “deviated in a material way from the manufacturer’s . . . specifications or from otherwise identical units manufactured to the same manufactured specifications” MISS. CODE ANN. § 11-1-63(a)(i)(1). Plaintiff is not necessarily required to put on evidence of Poly’s design specifications. *See Cooper Tire & Rubber Co. v. Tuckier*, 826 So. 2d 679, 683-84 (Miss. 2002); *Shelter Ins. Co. v. Mercedes Benz, USA*, 2006 WL 1601770, at *1-*2 (N.D. Miss. June 8, 2006). Rather, Plaintiffs must “prove that the [tank] *deviated*.” *Shelter Ins. Co. v. Mercedes Benz*,

USA, 236 F. App'x 45, 47-48 (5th Cir. 2007). A jury could reasonably infer from the evidence cited above that an air void in the tank is a deviation from Poly's specifications and/or otherwise identical tanks manufactured by Poly.

2. *Unreasonably Dangerous*

Next, Poly argues that Plaintiff has not presented evidence that the alleged defect was “unreasonably dangerous” as required by the MPLA. *See* MISS. CODE ANN. § 11-1-63(a)(ii). The Mississippi Supreme Court has used a risk-utility analysis to determine whether a product is unreasonably dangerous. *See Smith v. Mack Trucks, Inc.*, 819 So. 2d 1258, 1262-63 (Miss. 2002); *see also Young v. Bristol-Myers Squib Co.*, 2017 WL 706320, at *5-*6 (N.D. Miss. Feb. 22, 2017). Under this analysis, a product is “unreasonably dangerous” if its utility is “outweighed by its danger.” *Smith*, 819 So. 2d at 1263. The Court considers the following factors:

- (1) The usefulness and desirability of the product – its utility to the user and to the public as a whole.
- (2) The safety aspects of the product – the likelihood that it will cause injury, and the probable seriousness of the injury.
- (3) The availability of a substitute product which would meet the same need and not be as unsafe.
- (4) The manufacturer's ability to eliminate the unsafe character of the product without impairing its usefulness or making it too expensive to maintain its utility.
- (5) The user's ability to avoid danger by the exercise of care in the use of the product.
- (6) The user's anticipated awareness of the dangers inherent in the product and their avoidability, because of general public knowledge of

the obvious condition of the product, or of the existence of suitable warnings or instructions.

(7) The feasibility, on the part of the manufacturer, of spreading the loss by setting the price of the product or carrying liability insurance.

Id.

Many of the factors in Mississippi's risk-utility analysis are not applicable here because an air void is not a characteristic inherent to a polyethylene tank. Rather, it was a manufacturing defect. The void in the tank has no relation to its usefulness, and a jury could reasonably conclude – based on the evidence cited above – that a tank without a void would have been safer, while providing the same utility.

Plaintiff's experts testified that the crack in the tank would not have occurred but for the void. Exhibit C [145-3], at 15; Exhibit C [135-3], at 5. Also, it is undisputed that Poly conducted testing to identify such flaws after casting. Exhibit C [135-3], at 21; Exhibit B [135-2], at 5; Exhibit A [135-1], at 38. Poly's representative testified that a void or bubble in the tank can cause "some degree of weakness," which would "raise some concern and probably downgrade the tank." Exhibit A [135-1], at 38. Therefore, if Poly finds a bubble in the tank, it repairs it, as necessary and possible. Exhibit B [135-2], at 5. Finally, the manufacturing standards governing the tank provided that its "walls shall be free, as commercially practicable, of visual defects such as foreign inclusions, air bubbles, pinholes, pimples, crazing, cracking and delaminations that will impair the serviceability of the vessel." Exhibit L to Motion for Summary Judgment at 3, *Burroughs Diesel, Inc. v. Baker Petrolite, LLC*, No. 2:18-

CV-26-KS-MTP (S.D. Miss. June 12, 2019), ECF No. 135-12. Considering this evidence, a jury could reasonably conclude that the void in the HCl tank rendered the tank “unreasonably dangerous,” as contemplated by the MPLA. *See Forbes v. GM Corp.*, 935 So. 2d 869, 879 (Miss. 2006).

3. Causation

Finally, Poly argues that Plaintiff can not prove that the alleged defect caused the spill. Rather, Poly contends that Baker’s over-filling of the tank caused the spill.

Under Mississippi law, “there may be more than one proximate cause of an injury.” *Miss. Power & Light Co. v. Walters*, 158 So. 2d 2, 20 (Miss. 1963). Plaintiff has presented evidence that the void in the tank was a proximate cause of the rupture, along with Baker’s over-filling of the tank. *See, e.g.* Exhibit C [145-3], at 15; Exhibit C [135-3], at 5. Therefore, a jury could reasonably conclude that a defect in the tank was a proximate cause of Plaintiff’s alleged injuries.

D. Conclusion

For these reasons, the Court **grants in part and denies in part** Poly’s Motion for Summary Judgment [135]. The Court grants the motion with respect to Plaintiff’s design defect claim, but the Court denies it in all other respects.

VIII. MOTION FOR SUMMARY JUDGMENT AS TO BAKER [147]

The Baker Defendants filed a Motion for Summary Judgment [147] as to numerous elements of Plaintiff’s alleged damages. Plaintiff “has the burden of proving any amount of damages with reasonable certainty.” *Brothers v. Winstead*, 129

So. 3d 906, 925 (Miss. 2014). Plaintiff must present sufficient evidence to remove the quantum of damages “from the realm of speculation and conjecture” *Adams v. U.S. Homecrafters, Inc.*, 744 So. 2d 736, 740 (Miss. 1999). However, Plaintiff “should not be deprived of its right to recover because of its inability to prove with absolute certainty the extent of the loss” *Id.* The “law does not require such absolute accuracy of proof.” *Id.* Indeed, “a measure of speculation and conjecture attends even damage proof all would agree reasonably certain.” *Brothers*, 129 So. 2d at 925; *see also Piney Woods Country Life Sch. V. Shell Oil Co.*, 116 F.3d 478, 1997 WL 256767, at *9 (5th Cir. 1997).

A. Metal Buildings

First, Baker argues that the proper measure of the damage to Plaintiff’s metal buildings is the cost of repair or, phrased differently, the cost to restore them to their pre-spill condition. Baker contends that Plaintiff has not presented any evidence of the cost to repair the buildings, and, therefore, summary judgment is appropriate as to that element of Plaintiff’s damages. In response, Plaintiff argues that the diminution in the buildings’ fair market value is the appropriate measure of damages, and that it has presented sufficient evidence from which a jury could determine an amount of damages.

“As a general rule, the measure of damages in actions for permanent injury to land where there is no willful trespass is the difference in value in the before-and-after damage to the premises.” *Harrison v. McMillan*, 828 So. 2d 756, 769 (Miss.

2002); *see also Blackard v. Hercules, Inc.*, 2014 WL 3548829, at *10 (S.D. Miss. July 17, 2014). This “before and after” rule “is not a hard and fast or inflexible rule applicable under all circumstances, and it will not apply where there is a more definite, equitable, and accurate way by which the damages may be determined.” *Bynum v. Mandrel Indus., Inc.*, 241 So. 2d 629, 634 (Miss. 1970). For example, “where the land, or buildings located on the property, has been damaged but the property may be restored to its former condition at a cost less than the value determined by the diminution of the value of the land, the cost of restoration of the property, plus compensation for the loss of its uses, may be the measure of damages.” *Harrison*, 828 So. 2d at 769; *see also Waggener v. Leggett*, 150 So. 2d 529, 531 (Miss. 1963). “This is particularly true where the adoption of the difference in value as the measure of damages would be difficult and uncertain, or where the injury is not so much to the land itself as to improvements thereon.” *Bynum*, 241 So. 2d at 635.

The Court will assume, for the purpose of addressing the current motion, that the “before and after” rule applies, as Plaintiff argues. Plaintiff has provided evidence of the metal buildings’ value before the spill – an appraisal by its expert, John Adamson. Exhibit D to Motion for Summary Judgment, *Burroughs Diesel, Inc. v. Baker Petrolite, LLC*, No. 2:18-CV-26-KS-MTP (S.D. Miss. June 20, 2019), ECF No. 147-4. However, the Court excluded Lorenzo’s opinion regarding the fair market value of the metal buildings after the spill, and Plaintiff has not directed the Court to any admissible evidence of the metal buildings’ fair market value after the spill.

Likewise, the Court excluded Lorenzo's opinions regarding the loss in useful life of the metal buildings' roofing and side panels, and Plaintiff has not directed the Court to any admissible evidence from which a jury could infer the diminution in value of the metal buildings.

Therefore, Plaintiff can not meet its burden of proving the amount of damage to the metal buildings with reasonable certainty, and the Court grants this aspect of Baker's motion.

B. Cleanup

Next, Baker argues that Plaintiff has not provided any evidence of the necessity, scope, or cost of its alleged cleanup efforts. The Court disagrees. First, the record contains expert testimony that that Plaintiff's entire property was exposed, to some degree, to a cloud of HCl vapor. *See, e.g.* Exhibit E [145-5], at 3. According to the Edwards report, multiple surfaces across the property tested positive for chlorides, an indicator of HCl exposure. *Id.* at 43. This is sufficient basis for a jury to infer that some degree of cleanup was necessary.

As for the alleged scope and cost of cleanup, the Court agrees that Plaintiff's evidence is sketchy. But Plaintiff is not required to prove damages with "absolute certainty." *Adams*, 744 So. 2d at 740. Michael and Robert Burroughs provided their best recollection regarding what was done, the number of employees utilized, and the number of hours worked. While there is ample material for impeachment of their estimates during cross-examination, a jury could reasonably award Plaintiff *some*

cleanup costs based on their testimony. The Court denies this aspect of Defendant's motion.

C. *Tire Inventory*

Next, Baker argues that Plaintiff has no evidence that its tire inventory was damaged by the HCl spill. The Court disagrees. It is undisputed that Goodyear and Michelin voided the warranties on their tires that Plaintiff had in inventory. In the Court's opinion, a jury could reasonably infer that at least some of Plaintiff's tire inventory was damaged by the HCl spill or, at the very least, that the value of the inventory was damaged. The Court denies this aspect of Defendant's motion.

D. *Generators*

Baker also argues that Plaintiff has no evidence that its diesel generators were damaged by the HCl spill. In response, Plaintiff did not address the generators or refer the Court to any specific evidence that the generators were damaged by the HCl spill. The Court is not obligated to search the record for evidence in support of Plaintiff's claims. *RSR Corp. v. Int'l Ins. Co.*, 612 F.3d 851, 857 (5th Cir. 2010). "Rather, the party opposing the summary judgment is required to identify specific evidence in the record and to articulate precisely how this evidence supports his claim." *Id.*; see also *Texas v. EEOC*, 933 F.3d 433, 446 (5th Cir. 2019); *C. F. Dahlberg & Co., Inc. v. Chevron U.S.A., Inc.*, 836 F.2d 915, 920 (5th Cir. 1988).

Plaintiff generally referred to the testimony and report of its expert, Fernando Lorenzo, but the Court excluded Lorenzo's opinions regarding the generators.

Therefore, Plaintiff has failed to demonstrate the existence of a genuine dispute of material fact on this issue, and the Court grants Baker's motion with respect to Plaintiff's past and future repairs to the diesel generators.

E. Tools & Equipment

Next, Baker argues that Plaintiff has insufficient evidence to support its claimed damages to tools and equipment. The Court disagrees. Plaintiff's expert, Lorenzo, intends to testify that tools and equipment were damaged by the HCl exposure. As discussed above, Lorenzo's testimony on this point is susceptible to cross-examination, but he provided a rational basis for his opinions. His failure to observe the tools firsthand is not fatal to his testimony or Plaintiff's claim for damages. The Court denies this aspect of Baker's motion.

F. Miscellaneous

Finally, Baker argues that summary judgment is appropriate as to numerous miscellaneous elements of damages, including forklifts and loaders, halogen lights, surveillance system, wrecker trucks, forklift tires, tires on equipment and vehicles in the wrecker building, electrical repairs, steel cable replacement, machine repairs, and HVAC repairs. See Exhibit B to Motion for Summary Judgment at 3-6, *Burroughs Diesel, Inc. v. Baker Petrolite, LLC*, No. 2:18-CV-26-KS-MTP (S.D. Miss. June 20, 2019), ECF No. 148. Baker argues that Plaintiff has no evidence that these repairs were caused by the HCl spill.

In response, Plaintiff did not address each of these elements of damages or

refer the Court to specific evidence in support of them. Again, the Court is not obligated to search the record for evidence in support of Plaintiff's claims. *RSR Corp.*, 612 F.3d at 857. "Rather, the party opposing the summary judgment is required to identify specific evidence in the record and to articulate precisely how this evidence supports his claim." *Id.* Plaintiff generally referred to Lorenzo's testimony and report, but the Court excluded any testimony from Lorenzo about the alleged damage to the wrecker trucks, the tires and equipment in the wrecker building, the forklift tires, and all of Plaintiff's "Miscellaneous Repairs/Quotes for Damages," see Exhibit B [147-2], at 3-6, except the halogen light kits. Therefore, the Court grants this aspect of Baker's motion, except with respect to Plaintiff's claimed damages to the halogen light kits.

IX. CONCLUSION

For these reasons, the Court rules as follows:

1. The Court **grants** Baker's Motion to Strike [174] portions of the affidavit of Plaintiff's expert, Fernando Lorenzo.
2. The Court **grants in part and denies in part** Baker's Motion to Exclude [145] the testimony of Plaintiff's expert, Fernando Lorenzo. Specifically, the Court grants the motion with respect to Lorenzo's opinions regarding the remaining useful life of the metal buildings' roofing panels and side panels, and with respect to Lorenzo's opinions regarding several miscellaneous repair invoices. The Court denies the motion in all other respects.
3. The Court **denies** Poly's Motion to Exclude [137] certain testimony by Plaintiff's experts, Fernando Lorenzo and Roger Craddock.
4. The Court **denies** Plaintiff's Motion to Exclude [140] certain

testimony by Baker's expert, Gale Hoffnagle.

5. The Court **denies as moot** Plaintiff's Motion to Exclude [142] certain testimony by Baker's expert, James Koerber.
6. The Court **grants in part and denies in part** Poly's Motion for Summary Judgment [135]. The Court grants the motion with respect to Plaintiff's design defect claim, but the Court denies it in all other respects.
7. The Court **grants in part and denies in part** Baker's Motion for Summary Judgment [147]. The Court denies the motion with respect to Plaintiff's claimed cleanup costs, tire inventory, tools and equipment, and halogen lights, but the Court grants the motion in all other respects.

SO ORDERED AND ADJUDGED this 22nd day of October, 2019.

/s/ Keith Starrett

KEITH STARRETT
UNITED STATES DISTRICT JUDGE